

IN THE CLAIMS:

Please substitute amended claims 1-18, and add claim 19 as follows:

1. (Amended) A chip for a chip-containing portable article, in particular an article of card format, the chip comprising a silicon substrate layer whose active face has circuits integrated therein defining a central processor unit and memories, an additional layer of silicon covering at least part of said active face, and physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu$ m.

2. (Amended) A chip according to claim 1, wherein the physical means are means providing physical protection against the action of electromagnetic radiation in the infrared range.

3. (Amended) A chip according to claim 2, wherein the physical means are means providing physical protection against the action of electromagnetic radiation in the ultraviolet, visible, and infrared ranges.

4. (Amended) A chip according to claim 1, wherein the additional silicon layer is sealed to the active face of the silicon substrate layer by a sealing layer.

OK  
5. (Amended) A chip according to claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are silicon dopants.

6. (Amended) A chip according to claim 5, wherein the concentration of silicon dopants lies in the range  $10^{17}$  to  $10^{20}$  atoms per  $\text{cm}^3$ , and is preferably about  $10^{19}$  atoms per  $\text{cm}^3$ .

7. (Amended) A chip according to claim 5, wherein the silicon dopants are phosphorus or boron.

8. (Amended) A chip according to claim 5, wherein the silicon dopants are present in the silicon substrate layer in its portion remote from its active face.

9. (Amended) A chip according to claim 5, wherein the silicon dopants are present in the additional silicon layer.

10. (Amended) A chip according to claim 1, wherein the physical means for providing physical protection against the

action of electromagnetic radiation are formed by surface irregularities.

11. (Amended) A chip according to claim 10, wherein the surface irregularities are formed in the rear face of the silicon substrate layer remote from its active face.

12. (Amended) A chip according to claim 10, wherein the surface irregularities are provided in the bottom face of the additional layer.

13. (Amended) A chip according to claim 10, wherein the surface irregularities are provided in the top face of the additional layer.

14. (Amended) A chip according to claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are formed by at least one layer of metal.

15. (Amended) A chip according to claim 14, wherein the metal layer has a thickness greater than 50 Å.

16. (Amended) A chip according to claim 14, wherein the metal layer is placed on the bottom face of the additional layer.

17. (Amended) A chip according to claim 14, wherein the metal layer is placed on the top face of the additional layer.

*AB5  
(contd)*  
18. (Amended) A chip according to claim 14, wherein the metal layer is placed on the rear face of the silicon substrate layer.

---

*AB6*  
19. (New) A chip according to claim 15, wherein the metal layer has a thickness of about 100 Å.

---